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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,738	04/15/2004	Jason P. Chinn	P-097-US2	6732

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THERAVANCE, INC.  
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EXAMINER

O SULLIVAN, PETER G

ART UNIT PAPER NUMBER

1621

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/824,738

Applicant(s)

CHINN ET AL.

Examiner

Peter G. O'Sullivan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 40-64 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 40-64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

Claims 40-64 are pending in this application which should be reviewed for errors.

Claims 40-64 are generic to a plurality of disclosed patentably distinct species comprising compounds, for example, wherein Q is methylene or amino and x is oxy or amino.. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

In a telephone conversation with applicants' representative, Mr. Hagenah elected the species of compound 27 of claim 27 with traverse. Applicants' compounds wherein x is oxy, R2 is alkylene optionally substituted with alkyl, Y is amino, alkylamino or dialkylamino, and which are not further substituted by sulfur, amino, ester, cyano, amide, urethane, urea or oxime are examined therewith with all other compounds held withdrawn from consideration.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 40-47, 51, 52 and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Lacefield et al., GB 1584,428, who disclose N,N'-[methylenebis[4-chloro-2,1-phenylene)oxy-3,1-propanediyl]]bis-1-butanamine and other anticipating compounds.

Claims 40-45, 48, 53, 56, and 61-63 are rejected under 35 U.S.C. 102(b) as being anticipated by Werner, US 3,449,418, who discloses 3,3'-[methylenebis[(2,6-di-tert-butyl-p-phenylene)oxy]]bis[N,N-dimethylpropylamine] and other anticipating compounds.

Claims 40, 41-43, 45, 46-48, 51, 52, 53 and 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Wegler et al., DE 1,219,039, who disclose 3,3'-[methylenebis(phenyleneoxy)]bis-propylamine and other anticipating compounds.

Claims 40, 42, 43, 45, 46, 53, 61 and 62 are rejected under 35 U.S.C. 102(b) as being anticipated by Benoit et al., Chem. Abst. 47:12092, who disclose 2,2'-[methylenebis(4,1-phenyleneoxy)]bis[N,N-diethyl-ethanamine] and other anticipating compounds.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

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the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 40, 41-43, 44 and 49-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wegler et al., DE 1219039. Wegler et al. disclose compounds of their generic formula given at the top of column 1 useful as curing agents for epoxy resins and further disclose anticipating compounds such as the one noted above. The instant invention differs from the teaching of Wegler et al. in that not all possible compounds are exemplified. It would have been prima facie obvious at the time the invention was made to one of ordinary skill in the art, to make further generically disclosed compounds of Wegler wherein the orientation of the phenyl moieties to the central methylene vary and wherein the phenyl substituents may be those generically taught, and especially in view of anticipating compounds already made, to expect to obtain further compounds useful as epoxy curing agents.

Claims 4-49, 51, 52, 54, 58 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lacefield. Lacefield discloses compounds of generic formula given on page 1 useful as herbicides and further disclose anticipating compounds such as the one noted above. The instant invention differs from the teaching of Lacefield in that not all possible compounds are exemplified. Lacefield et al. disclose the aminoxy moiety

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may be of varying length and branching and in that the amino moiety may be primary, secondary or tertiary. It would have been prima facie obvious at the time the invention was made to one of ordinary skill in the art, to make further generically disclosed compounds of Lacefield wherein the orientation of the phenyl moieties to the central methylene vary and wherein the phenyl substituents may be those generically taught, and especially in view of anticipating compounds already made, to expect to obtain further compounds useful as herbicides. Position isomers are held to be obvious. In re Mills 126 USPQ 513.

Claims 40, 42, 43, 44, 46, 48, 49, 52, 61, 62 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lowe et al., Chem. Abst. 46:48437, who disclose 2,2'[(1,2-diethyl-1,2-ethanediyl)bis(4,1-phenyleneoxy)]bis[N,N-diethyl-ethanamine] dihydrochloride and 2,2''-[(1,2-diethylene)bis(2,6-diiodo-p-phenyleneoxy)]bis-triethylamine dihydrochloride to be useful as antituberculous compounds. The compounds of Lowe et al. differ as position isomers/homologues from the compounds of the instant invention. It would have been prima facie obvious at the time the invention was made to one of ordinary skill in the art to start with the compounds of Lowe et al., to make position isomers/homologues thereof and to expect them to be useful as antituberculous compounds. Position isomers/homologues are held to be obvious. In re Mills 126 USPQ 513.

Claims 40-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teaching of Werner, US 3449,418, and Benoit et al., Chem. Abst. 47:12092, taken with Marxer et al., US 3,247,199, and Rafferty et al., US 5,736,568.

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Werner discloses anti-inflammatory, antiprotozoal, antifungal and antiparasitic agents of the formula shown at the top of column 1 and further disclose anticipating compounds such as the one noted above. In the generic formula of Werner, the phenyl moieties may be substituted by a variety of substituents including hydrogen, alkyl, halogen, etc. the central alkylene moiety may be further alkyl substituted. Benoit et al. is relied on for teaching the above noted anticipating compounds to be bacteriostatic. The instant invention differs from the teaching of the cited prior art as combined in that additional substituents such as trifluoromethyl may substitute the phenyl moieties, in that the amino groups may be unsubstituted and in that the central alkyl moiety may be cycloalkyl. Additionally applicants disclose an analgesic utility for their compounds. Rafferty, for similar anti-inflammatory compounds disclose the equivalency of primary, secondary and tertiary amine end groups and further disclose the equivalency of groups such as hydrogen, halogen, haloalkyl, alkoxy, etc with which to substituted the phenyl moieties. Marxer et al. is relied on to disclose the equivalence of alkyl to cycloalkyl as central moieties in similar compounds useful as antipyretic, analgesic and antiinflammatory agents (s. Col. 2, middle paragraph). It would have been prima facie obvious at the time the invention was made to make applicants' compounds and to expect to obtain compounds useful as analgesics, anti-inflammatory agents, antibacterial agents, etc. Position isomers/homologues of disclosed compounds would also be obvious. In re Mills 126 USPQ 513.

No claim is allowed.

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Any inquiry concerning this communication should be directed to Peter G.

O'Sullivan at telephone number (571)272-0642.

  
PETER O'SULLIVAN  
PRIMARY EXAMINER  
GROUP 1220